IN THE CLAIMS

1. (Cancelled)

2. (Currently Amended) ~~The method of claim 1 further comprising the steps of:~~ <u>In a data communications device, a method for inserting data into packets associated with a communications session between a first and second computerized devices, the method comprising the steps of:</u>

<u>receiving a first packet containing data being propagated from the first computerized device to the second computerized device in the communications session;</u>

<u>inserting a first amount of extra data into the first packet to alter a size of the first packet;</u>

<u>forwarding the first packet including the first amount of extra data to the second computerized device;</u>

receiving a second packet being propagated from the second computerized device to the first computerized device in the communication session, the second packet including acknowledgment information for the first packet acknowledging receipt of the first packet by the second computerized device;

adjusting the acknowledgment information in the second packet based upon the first amount of extra data inserted into the first packet; and

forwarding the second packet including the adjusted acknowledgment information to the first computerized device such that the first computerized device receives the adjusted acknowledgement information that properly corresponds with a first connection state maintained by the first computerized device for the communications session between the first and second computerized devices.

3. (Original) The method of claim 2 wherein the step of adjusting the acknowledgement information comprises the step of subtracting from the acknowledgement information a value equal to the first amount of extra data added to the first packet.

4. (Currently Amended) ~~The method of claim 1 further comprising the steps of:~~ In a data communications device, a method for inserting data into packets associated with a communications session between a first and second computerized devices, the method comprising the steps of:

receiving a first packet containing data being propagated from the first computerized device to the second computerized device in the communications session;

inserting a first amount of extra data into the first packet to alter a size of the first packet;

forwarding the first packet including the first amount of extra data to the second computerized device;

adjusting sequence information in a subsequent packet being propagated, after the first packet, from the first computerized device to the second computerized device to account for the extra data added into the first packet; and

forwarding the subsequent packet including the adjusted sequence information to the second computerized device such that the second computerized device receives the adjusted sequence information that properly corresponds with a second connection state maintained by the second computerized device for the communications session between the first and second computerized devices.

5. (Original) The method of claim 4 wherein the step of adjusting sequence information in a subsequent packet comprises the step of adding to the sequence information a value equal to the first amount of extra data added to the first

packet such that the step of forwarding the subsequent packet causes the second computerized device to receive the adjusted sequence information.

6. (Original) The method of claim 2 comprising the steps of:

continuing to exchange subsequent packets between the first and second computerized devices, and for each packet exchanged, adjusting connection state information including sequence and acknowledgement information to account for extra data added into all packets exchanged between the first and second computerized devices such that the first and second computerized devices are able to maintain proper respective first and second connection states.

7. (Currently Amended) The method or claim 4 ~~claim 1~~ comprising the steps of:

maintaining connection state data in the data communications device that tracks an amount of extra data inserted into packets exchanged between the first and second computerized devices; and

modifying connection information within packets passing through the data communications device that are exchanged between the first and second computerized devices to allow the first and second computerized devices to maintain proper respective first and second connection states regardless of the amount of extra data added in the packets.

8. (Original) The method of claim 7 wherein the step of modifying connection information comprises at least one of the steps of:

adjusting sequence information within the packets exchanged between the first and second computerized devices;

adjusting acknowledgement information within the packets exchanged between the first and second computerized devices;

adjust error correction information within the packets exchanged between the first and second computerized devices; and

adjust packet length information within the packets exchanged between the first and second computerized devices.

9. (Original) The method of claim 7 comprising the steps of:

receiving a second packet being propagated from the second computerized device to the first computerized device in the communication session, the second packet including acknowledgment information for the first packet acknowledging receipt of the first packet by the second computerized device;

adjusting the acknowledgment information in the second packet based upon the first amount of extra data inserted into the first packet; and

inserting a second amount of extra data into the second packet to alter the size of the second packet; and

forwarding the second packet including the adjusted acknowledgment information and the second amount of extra data to the first computerized device such that the first computerized device receives the adjusted acknowledgement information that properly corresponds with a first connection state maintained by the first computerized device for the communications session between the first and second computerized devices and further receive the second amount of extra data; and

wherein the step of maintaining connection state data in the data communications device that tracks an amount of extra data inserted into packets exchanged between the first and second computerized devices tracks the second amount of extra data inserted into the second packet; and

wherein the step of modifying connection information within packets passing through the data communications device that are exchanged between the first and second computerized devices modifies connection information with packets exchanged between the first and second computerized devices subsequent to the first and second packets such that the first and second amount

of extra data to not adversely effect respective first and second connection states respectively maintained in the first and second computerized devices.

10. (Currently Amended) The method of <u>claim 4</u> ~~claim 1~~ wherein the first packet contains a hypertext transport protocol packet requesting data from a hypertext transport protocol server accessible by the second computerized device.

11. (Cancelled)

12. (Currently Amended) ~~The data communications device of claim 11 wherein the insertion manager process causes the data communications device to perform the operations of:~~ <u>A data communications device capable of inserting data into packets associated with a communications session between a first and second computerized devices, the data communications device comprising:</u>

<u>at least one communications interface;</u>

<u>a memory;</u>

<u>a processor; and</u>

<u>an interconnection mechanism coupling the at least one communications interface, the memory and the processor;</u>

<u>wherein the memory is encoded with an insertion manager application that when performed on the processor, produces an insertion manager process that causes the computerized device to insert data into packets associated with a communications session between a first and second computerized devices by performing the operations of:</u>

<u>receiving a first packet containing data being propagated from the first computerized device to the second computerized device in the communications session;</u>

<u>inserting a first amount of extra data into the first packet to alter a size of the first packet;</u>

forwarding the first packet including the first amount of extra data to the second computerized device;

receiving a second packet being propagated from the second computerized device to the first computerized device in the communication session, the second packet including acknowledgment information for the first packet acknowledging receipt of the first packet by the second computerized device;

adjusting the acknowledgment information in the second packet based upon the first amount of extra data inserted into the first packet; and

forwarding the second packet including the adjusted acknowledgment information to the first computerized device such that the first computerized device receives the adjusted acknowledgement information that properly corresponds with a first connection state maintained by the first computerized device for the communications session between the first and second computerized devices.

13. (Original) The data communications device of claim 12 wherein when the insertion manager process causes the data communications device to perform the operation of adjusting the acknowledgement information, the insertion manager process causes the data communications device to perform the operation of subtracting from the acknowledgement information a value equal to the first amount of extra data added to the first packet.

14. (Currently Amended) ~~The data communications device of claim 11 wherein the insertion manager process causes the data communications device to perform the operations of :~~ A data communications device capable of inserting data into packets associated with a communications session between a first and second computerized devices, the data communications device comprising:

at least one communications interface;

a memory;

a processor; and

an interconnection mechanism coupling the at least one communications interface, the memory and the processor;

wherein the memory is encoded with an insertion manager application that when performed on the processor, produces an insertion manager process that causes the computerized device to insert data into packets associated with a communications session between a first and second computerized devices by performing the operations of:

receiving a first packet containing data being propagated from the first computerized device to the second computerized device in the communications session;

inserting a first amount of extra data into the first packet to alter a size of the first packet;

forwarding the first packet including the first amount of extra data to the second computerized device;

adjusting sequence information in a subsequent packet being propagated, after the first packet, from the first computerized device to the second computerized device to account for the extra data added into the first packet; and

forwarding the subsequent packet including the adjusted sequence information to the second computerized device such that the second computerized device receives the adjusted sequence information that properly corresponds with a second connection state maintained by the second computerized device for the communications session between the first and second computerized devices.

15. (Original) The data communications device of claim 14 wherein when the insertion manager process causes the data communications device to perform the operation of adjusting sequence information in a subsequent packet, the insertion manager process causes the data communications device to perform the operation of adding to the sequence information a value equal to the first

amount of extra data added to the first packet such that the step of forwarding the subsequent packet causes the second computerized device to receive the adjusted sequence information.

16. (Original) The data communications device of claim 12 wherein the insertion manager process causes the data communications device to perform the operation of :

continuing to exchange subsequent packets between the first and second computerized devices, and for each packet exchanged, adjusting connection state information including sequence and acknowledgement information to account for extra data added into all packets exchanged between the first and second computerized devices such that the first and second computerized devices are able to maintain proper respective first and second connection states.

17. (Currently Amended) The data communications device or <u>claim 14</u> <s>claim 11</s> wherein the insertion manager process causes the data communications device to perform the operations of :

maintaining connection state data in the data communications device that tracks an amount of extra data inserted into packets exchanged between the first and second computerized devices; and

modifying connection information within packets passing through the data communications device that are exchanged between the first and second computerized devices to allow the first and second computerized devices to maintain proper respective first and second connection states regardless of the amount of extra data added in the packets.

18. (Original) The data communications device of claim 17 wherein when the insertion manager process causes the data communications device to perform the operation of modifying connection information, the insertion manager process

causes the data communications device to perform at least one of the operations of :

adjusting sequence information within the packets exchanged between the first and second computerized devices;

adjusting acknowledgement information within the packets exchanged between the first and second computerized devices;

adjust error correction information within the packets exchanged between the first and second computerized devices; and

adjust packet length information within the packets exchanged between the first and second computerized devices.

19. (Original) The data communications device of claim 17 wherein the insertion manager process causes the data communications device to perform the operations of :

receiving a second packet being propagated from the second computerized device to the first computerized device in the communication session, the second packet including acknowledgment information for the first packet acknowledging receipt of the first packet by the second computerized device;

adjusting the acknowledgment information in the second packet based upon the first amount of extra data inserted into the first packet; and

inserting a second amount of extra data into the second packet to alter the size of the second packet; and

forwarding the second packet including the adjusted acknowledgment information and the second amount of extra data to the first computerized device such that the first computerized device receives the adjusted acknowledgement information that properly corresponds with a first connection state maintained by the first computerized device for the communications session between the first and second computerized devices and further receive the second amount of extra data; and

wherein the step of maintaining connection state data in the data communications device that tracks an amount of extra data inserted into packets exchanged between the first and second computerized devices tracks the second amount of extra data inserted into the second packet; and

wherein the step of modifying connection information within packets passing through the data communications device that are exchanged between the first and second computerized devices modifies connection information with packets exchanged between the first and second computerized devices subsequent to the first and second packets such that the first and second amount of extra data to not adversely effect respective first and second connection states respectively maintained in the first and second computerized devices.

20. (Currently Amended) The data communications device of <u>claim 14</u> ~~claim 11~~ wherein the first packet contains a hypertext transport protocol packet requesting data from a hypertext transport protocol server accessible by the second computerized device.

21. (Currently Amended) A computer program product having a computer-readable medium including computer program logic encoded thereon that, when performed on a processor in a computerized device having a coupling of a memory, a processor, and at least one communications interface provides a method for inserting data into packets associated with a communications session between a first and second computerized devices by causing the computerized device to perform the operations of:

receiving a first packet containing data being propagated from the first computerized device to the second computerized device in the communications session;

inserting a first amount of extra data into the first packet to alter <u>a</u> ~~the~~ size of the first packet; ~~and~~

forwarding the first packet including the first amount of extra data to the second computerized device<u>;</u>

<u>receiving a second packet being propagated from the second computerized device to the first computerized device in the communication session, the second packet including acknowledgment information for the first packet acknowledging receipt of the first packet by the second computerized device;</u>

<u>adjusting the acknowledgment information in the second packet based upon the first amount of extra data inserted into the first packet; and</u>

<u>forwarding the second packet including the adjusted acknowledgment information to the first computerized device such that the first computerized device receives the adjusted acknowledgement information that properly corresponds with a first connection state maintained by the first computerized device for the communications session between the first and second computerized devices</u>.

22. (Currently Amended) A data communications device capable of inserting data into packets associated with a communications session between a first and second computerized devices, the data communications device comprising:

at least one communications interface;

a memory;

a processor; and

an interconnection mechanism coupling the at least one communications interface, the memory and the processor;

wherein the memory is encoded with an insertion manager application that when performed on the processor, produces an insertion manager process that causes the computerized device to insert data into packets associated with a communications session between a first and second computerized devices by providing means including:

means for receiving a first packet containing data being propagated from the first computerized device to the second computerized device in the communications session;

means for inserting a first amount of extra data into the first packet to alter <u>a</u> the size of the first packet; and

means for forwarding the first packet including the first amount of extra data to the second computerized device<u>;</u>

<u>means for receiving a second packet being propagated from the second computerized device to the first computerized device in the communication session, the second packet including acknowledgment information for the first packet acknowledging receipt of the first packet by the second computerized device;</u>

<u>means for adjusting the acknowledgment information in the second packet based upon the first amount of extra data inserted into the first packet; and</u>

<u>means for forwarding the second packet including the adjusted acknowledgment information to the first computerized device such that the first computerized device receives the adjusted acknowledgement information that properly corresponds with a first connection state maintained by the first computerized device for the communications session between the first and second computerized devices.</u>

23.   (New) In a data communications device disposed in a network, a method for inserting data into packets associated with a communications session over the network between a first computer and a second computer, the method comprising steps of:

receiving a first packet transmitted over the network from the first computer to the second computer, the first packet being associated with the communications session and forwarded through a first portion of the network prior to receipt by the data communication device;

at the data communications device, inserting a first amount of extra data into the first packet to alter an original size of the first packet; and

forwarding the first packet including the first amount of extra data over a second portion of the network to the second computer.

24.   (New) A method as in claim 23 further comprising:

receiving a second packet being propagated from the second computer to the first computer in the communications session, the second packet including acknowledgment information acknowledging receipt of the first packet by the second computer;

adjusting the acknowledgment information in the second packet based upon the first amount of extra data inserted into the first packet; and

forwarding the second packet including the adjusted acknowledgment information to the first computer such that the first computer receives the adjusted acknowledgment information, the adjusted acknowledgment information indicating that the second computer received the first packet without any of the extra data.

25.   (New) A method as in claim 23 further comprising:

at the data communications device, after forwarding the first packet to the second computer, for each of at least one subsequent packet originated at the first computer and sent to the second computer:

      i) intercepting a respective subsequent packet;

      ii) inserting extra data into the respective subsequent packet;

      iii) forwarding the respective subsequent packet to the second computer;

in response to forwarding the at least one subsequent packet to the second computer, receiving an acknowledgment message from the second computer indicating receipt of the at least one subsequent packet as well as respective extra data inserted into the at least one subsequent packet by the data communications device;

in lieu of forwarding the acknowledgment message from the second computer to the first computer indicating that the second computer properly received the at least one subsequent packet, modifying the acknowledgment message to appear as though the second computer only received the at least one packet and corresponding data payload originated by the first computer without acknowledging receipt of the extra inserted by the data communications device into the at least one subsequent packet; and

forwarding the modified acknowledgment message to the first computer.

26.   (New) A method as in claim 25 further comprising:

intercepting messages from the second computer to the first computer;

inserting extra data in the intercepted messages from the second computer to the first computer; and

modifying an acknowledgment message originated by the first computer and sent to the second computer such that, although the acknowledgment message originally indicates acknowledgment of receipt of the messages sent from the second computer to the first computer as well as the inserted extra data by the data communications device, the

data communications device notifies the second computer that the first computer received the messages without the inserted extra data.

27.   (New) A method as in claim 25, wherein steps of receiving and forwarding the first packet and the second packet by the data communications device include supporting communications between the first computer and second computer according to TCP (Transmission Control Protocol), the data communication device being one of i) a switch, ii) a router, iii) a hub, iv) a bridge, v) a gateway of the network.

28.   (New) A method as in claim 25, wherein inserting the first amount of extra data into the first packet includes inserting information identifying an approximate location associated with the first computer in the network, the location information being used by the second computer to provide a custom response to the first packet sent by the first computer.

29.   (New) A method as in claim 2, wherein receiving the first packet includes receiving the first packet transmitted over a network from the first computer to the second computer, the first packet being initially forwarded through a first portion of the network prior to receipt by the data communication device; and
        wherein forwarding the first packet includes forwarding the first packet including the first amount of extra data from the data communications device over a second portion of the network to the second computer.

30.   (New) A method as in claim 4, wherein receiving the first packet includes receiving the first packet transmitted over a network from the first computer to the second computer, the first packet being initially forwarded

through a first portion of the network prior to receipt by the data communication device; and

wherein forwarding the first packet includes forwarding the first packet including the first amount of extra data from the data communications device over a second portion of the network to the second computer.